



粘合解决方案提供商

ADHESIVE SOLUTIONS PROVIDER

大连亨泰亨保塑料  
有限公司

DALIAN HUNTHUMBER  
PLASTICS CO., LTD.



UPHOLD INTEGRITY,  
EMBRACE NOVELTY

for more information, please visit our website:  
[www.hunthumber.com](http://www.hunthumber.com)

# Adhesive Solutions

We focus on grafted polyolefin products, striving to become a leader in the adhesive resin industry, and to build an industry champion that integrates production, research and development, and brand marketing.

## ABOUT US

Dalian Hunthumber Plastics Co., Ltd. was established in 2007, located in Dalian, Liaoning Province. It is a high-tech enterprise focusing on the research, development, production, and sales of functional polymer materials. The company benchmarks the related graft polyolefin products of international chemical giants, covering functional bonding resins, compatibilizers, and toughening agents. These products are mainly used in various fields of industrial manufacturing, such as high barrier multilayer co-extrusion packaging, aluminum-plastic composite panels, modified plastics, wood-plastic profiles, and low-smoke halogen-free flame-retardant cables. After more than a decade of development, it has become a leading domestic supplier of maleic anhydride graft products. The company has a building area of 12,000 square meters, and its products are sold at home and abroad, with an annual production capacity of more than 16,000 tons.

## PRODUCT OVERVIEW

Hunthumber™ products are produced through reactive extrusion, grafting monomers such as maleic anhydride onto the polyolefin polymer chain. The company's Unigraft™ and Bonditie™ modified polyolefin products can:

- Combine polar and non-polar materials in multilayer structures, used as bonding layers in co-extruded food, pharmaceutical, and cosmetic packaging
- Used as bonding layers in non-packaging applications such as aluminum-plastic composite panels and composite pipes
- As compatibilizers, improve the interface adhesion in polymer blends, enhance the binding of fillers to the polymer matrix, and improve the dispersion of fillers
- As toughening agents, enhance material toughness, improve mechanical and processing performance.

## PRODUCTION & DEVELOPMENT

The company has advanced high-torque twin-screw extrusion equipment, experimental workshops, and testing and analysis laboratories, capable of simulating processing performance experiments with single-layer, and multi-layer co-extruded blown film lines, and has introduced related equipment and analysis capabilities such as mechanical properties, rheological properties, and spectroscopic analysis.

The company cooperates with domestic universities, industry experts, and advanced laboratories. After years of technology development, it has applied for dozens of national technology patents. At the same time, product updates are closely integrated with the market, providing support to customers with high-quality products and services.

## PRODUCTS AND APPLICATIONS



### Multilayer co-extrusion barrier packaging film adhesive resin

Hunthumber™ high barrier packaging adhesive resin is made by grafting modification of polyolefin, introducing strong polar groups into the polymer chain, which retains the mechanical properties of polyolefin materials and endows the resin with excellent adhesion to polar materials. It can provide a strong bonding capability for PA/PE, EVOH/PE, has excellent chemical resistance, and complies with regulations for food packaging.



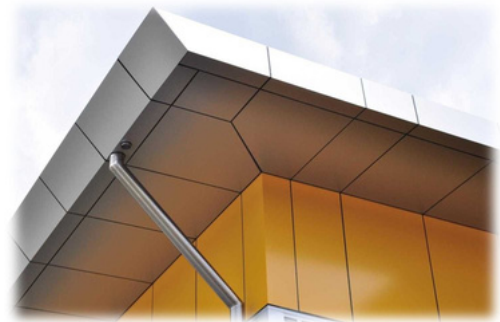
### Multilayer barrier container adhesive resin

Hunthumber™ multilayer barrier container adhesive resin is modified from LLDPE, chemically grafting maleic anhydride groups onto the non-polar polyethylene molecular chain, achieving adhesion between polyethylene resin and EVOH resin. It can be used in food packaging tubes, cosmetic tubes, high barrier pesticide bottles, plastic fuel tanks, etc. It has strong adhesion, lasting adhesive force, and good chemical corrosion resistance.



### Sausage casing film adhesive resin

Hunthumber™ sausage casing film adhesive resin is modified from LLDPE, chemically grafting maleic anhydride groups onto the non-polar polyethylene molecular chain, achieving adhesion between polyethylene resin and PA resin. It can be used in composite barrier films, sausage casings, etc. It has excellent processing performance, is a food-grade adhesive material, and has good chemical corrosion resistance.



### Aluminum composite panel adhesive resin

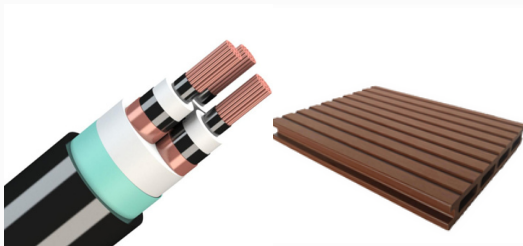
Hunthumber™ PE adhesive resin for aluminum plastic panels has been used in various aluminum plastic panels at home and abroad, adapting to various process requirements. Long-term use by customers has shown that this series of products has high bonding strength, good adhesion effect, and can replace imported products. It has good processing performance, easy film blowing, high adhesion strength, and good weather resistance.

## PRODUCTS AND APPLICATIONS



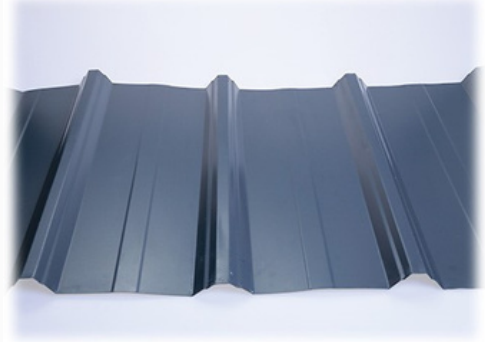
### Aluminum ceiling panel adhesive resin

Hunthumber™ aluminum ceiling panel adhesive resin is a modified polyolefin adhesive resin developed according to the application in the aluminum ceiling market, with excellent film blowing performance, no crystalline points in blown films, high adhesion strength, lasting adhesiveness, good weather resistance, and adaptation to climate temperature changes.



### PE series compatibilizers

Hunthumber™ PE series compatibilizers cover applications including wood-plastic profiles, low-smoke halogen-free flame-retardant cable materials, PA/PE, etc. This series of products can effectively improve the interface bonding of wood-plastic, increase strength, reduce water absorption, maintain mechanical properties, promote the dispersion of wood flour in the resin, and improve surface smoothness; it can effectively enhance the compatibility of the inorganic flame retardant aluminum hydroxide with the polyolefin matrix, enhancing flame retardancy while maintaining good mechanical properties, and providing good thermal aging effects.



### Bimetallic thermal insulating tile adhesive resin

Hunthumber™ bimetallic thermal insulating tile adhesive resin was developed according to the market demand for bimetallic thermal insulating tiles, effectively promoting product innovation in the market and facilitating rapid industry development. The product is environmentally safe, with good processing performance suitable for continuous and automated processing. It has high adhesion strength with galvanized sheets and aluminum materials, lasting adhesiveness, good processing performance, easy film blowing, good weather resistance, and adaptation to climate temperature changes.



### POE series compatibilizers/ nylon tougheners

Hunthumber™ POE grafted series compatibilizers/tougheners are maleic anhydride grafted polyolefin elastomers, mainly used for toughening PA6, PA66, reinforced toughening, and flame-retardant reinforced toughening, improving nylon's impact resistance and molding processability, reducing nylon's water absorption; they can also serve as compatibilizers for nylon and glass fiber.

## GRADE AND PHYSICAL PARAMETERS

For Technical Data Sheet(TDS) and Material Safety Data Sheet(MSDS),  
please consult the supplier

Grade (Unigraft™ series)	Melt Flow Index (190°/2.16 kg)(g/10min)	Density (g/cm <sup>3</sup> )	Melt Point (°C/°F)	Vicat Softening Point (°C/°F)	Grafting Rate Level (%)
CT2718	2.7	0.918	115/239	103/217	high (Concentrate)
CT2018	1.6	0.92	121/250	108/226	high (Concentrate)
CT1804	2.0	0.95	135/275	124/255	high (Concentrate)
CT2218	1.5	0.92	121/250	108/226	ultra high(Concentrate)
CT3718	2.2	0.92	115/239	103/217.4	ultra high(Concentrate)
CT4018	1.3	0.87	63/145.4	40/104	high (Concentrate)

The grafting rate level is defined as:

Low <0.2%; Medium 0.2-0.5%; High 0.5-1.0%; Ultra-high >1.0%



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AT3016	2.2	0.92	119/246	108/226	Multilayer Co-extruded Barrier Packaging
AT3018	2.0	0.92	119/246	108/226	Multilayer Co-extruded Barrier Packaging
AD318	2.1	0.92	116/241	105/221	Multilayer Co-extruded Barrier Packaging
AD428	2.1	0.92	116/241	105/221	Multilayer Co-extruded Barrier Packaging
JMV230	2.8	0.93	114/237	94/201	Composite Building Materials
JMV240	2.4	0.94	95/203	69/156	Composite Building Materials
JMV260	2.0	0.94	114/237	94/201	Composite Building Materials
JMV400	4.1	0.935	128/262	100/212	Composite Building Materials



## TYPICAL GRADE

### BONDITIE™ JMV240

Physical Properties	Test Methods	Value	Unit
density	ASTM D792 ISO 1183	0.938	g/cm <sup>3</sup>
MI ( 190°C/2.16kg )	ASTM D1238 ISO 1133	2.4	g/cm <sup>3</sup>
melt point	ASTM D3418 ISO 3146	95	°C
vicat softening point	ASTM D1525 ISO 306	69	°C

**Product Features:** JMV240 resin is specifically designed to provide high adhesion for metal and polyethylene, paper and polyethylene, etc. When transformed into film form and used as a thermal pressing layer film, it has a lower coefficient of friction, facilitating film processing and providing high adhesive performance.

**Application Areas:** Aluminum-plastic composites, paper-plastic composites, etc.



### BONDITIE™ AT3016

Physical Properties	Test Methods	Value	Unit
density	ASTM D792 ISO 1183	0.920	g/cm <sup>3</sup>
MI ( 190°C/2.16kg )	ASTM D1238 ISO 1133	2.0	g/cm <sup>3</sup>
melt point	ASTM D3418 ISO 3146	119	°C
vicat softening point	ASTM D1525 ISO 306	108	°C

**Product Features:** AT3016 resin can bond a variety of materials, commonly used to bond polyamide (PA), PE, and ethylene copolymers. When used for blow molding films, it has few spherulites and good thermal stability. Application Areas:

**Application Areas:** Multi-layer co-extruded high barrier films, used in food packaging, waterproofing membranes, and other fields.





**WORLDWIDE ADHESIVE SOLUTIONS PROVIDER**

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